SECTION 07115

BITUMINOUS DAMPPROOFING

PART 1 - **GENERAL**

0.1 DESCRIPTION OF WORK

- **A.** Work Included: This Section specifies cold-applied, emulsified-asphalt dampproofing applied to the exterior of below-grade surfaces on concrete and masonry foundation and retaining walls.
- **B.** Related Work: The following items are not included in this Section and will be performed under the designated Sections:
 - 1. Section 07131 SELF-ADHERING SHEET WATERPROOFING.
 - 2. Section 07141 COLD FLUID-APPLIED WATERPROOFING.
 - 3. Section 07142 HOT FLUID-APPLIED WATERPROOFING.
 - 4. Section 07170 BENTONITE WATERPROOFING.

0.2 SUBMITTALS

- **A.** Product Data: For each type of product indicated. Include recommendations for method of application, primer, number of coats, coverage or thickness, and protection course.
- **B.** Installer Certificates: Signed by manufacturers certifying that installers comply with requirements.
- **C.** Qualification Data: For Installer and for Testing and Inspection Agency.
- **D.** Product Test Reports: From a qualified independent testing agency indicating and interpreting test results of waterproofing for compliance with requirements, based on comprehensive testing of current waterproofing formulations.

0.3 QUALITY ASSURANCE

A. Source Limitations: Obtain primary dampproofing materials and primers through one source from a single manufacturer. Provide secondary materials recommended by manufacturer of primary materials.

0.4 PROJECT CONDITIONS

- **A.** Weather Limitations: Proceed with installation only when existing and forecasted weather conditions permit asphalt dampproofing to be performed according to manufacturers' written instructions.
- **B.** Ventilation: Provide adequate ventilation during application of dampproofing in enclosed spaces. Maintain ventilation until dampproofing has thoroughly cured.

PART 2 - PRODUCTS

0.1 BITUMINOUS DAMPPROOFING

A. Cold-Applied, Emulsified-Asphalt Dampproofing, Brush and Spray Coats: ASTM D 1227, Type III, Class 1.

0.2 MANUFACTURERS

- **A.** Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - 1. Euclid Chemical Company.
 - 2. Henry Company.
 - 3. Karnak Corporation.
 - 4. Meadows, W. R., Inc.
 - 5. Sonneborn, Div. of ChemRex, Inc.

0.3 MISCELLANEOUS MATERIALS

- **A.** Emulsified-Asphalt Primer: ASTM D 1227, Type III, Class 1, except diluted with water as recommended by manufacturer.
- **B.** Asphalt-Coated Glass Fabric: ASTM D 1668, Type I.
- **C.** Protection Course, Polystyrene Type: Fan-folded, rigid, extruded-polystyrene board insulation; nominal thickness not less than 3/16 inch.

PART 3 - EXECUTION

0.1 EXAMINATION

A. Examine substrates, with Applicator present, for compliance with manufacturer's requirements for surface smoothness and other conditions

affecting performance of work. Begin dampproofing application only after substrate construction and penetrating work have been completed and unsatisfactory conditions have been corrected.

0.2 PREPARATION

- **A.** Protection of Other Work: Mask or otherwise protect adjoining exposed surfaces from being stained, spotted, or coated with dampproofing. Prevent dampproofing materials from entering and clogging weep holes and drains.
- **B.** Clean substrates of projections and substances detrimental to work; fill voids, seal joints, and apply bond breakers if any, as recommended by prime material manufacturer. Concrete shall be allowed to cure for a minimum of 5 days after form removal prior to dampproofing application.
- **C.** Patch holes with mortar and allow to properly cure prior to dampproofing application.

0.3 APPLICATION

- **A.** Comply with manufacturer's written recommendations unless more stringent requirements are indicated or required by Project conditions to ensure satisfactory performance of dampproofing.
 - 1. Apply additional coats if recommended by manufacturer or required to achieve coverages indicated.
 - 2. Allow each coat of dampproofing to cure 24 hours before applying subsequent coats.
 - 3. Apply from finished-grade line to top of footing, extend over top of footing, and down a minimum of 6 inches over outside face of footing.
 - 4. Extend 12 inches onto intersecting walls and footings, but do not extend onto surfaces exposed to view when Project is completed.
 - 5. Install flashings and corner protection stripping at internal and external corners, changes in plane, construction joints, cracks, and where shown as "reinforced", by embedding an 8-inch- wide strip of asphalt-coated glass fabric in a heavy coat of dampproofing. Dampproofing coat required for embedding fabric is in addition to other coats required.
- **B.** On Concrete Foundations: Apply two brush or spray coats at not less than 1.5 gal./100 sq. ft. for first coat and 1 gal./100 sq. ft. for second coat.
- C. On Unparged Masonry Foundation Walls: Apply primer and two brush or spray coats at not less than 1.5 gal./100 sq. ft. for first coat and 1 gal./100 sq. ft. for second coat.
- **D.** On Backs of Concrete and Masonry Retaining Walls: Apply one brush or spray coat at not less than 1.25 gal./100 sq. ft.

0.4 INSTALLATION OF PROTECTION COURSE

A. Install protection course over completed-and-cured dampproofing. Comply with dampproofing material manufacturer's written recommendations for attaching protection course. Support protection course with spot application of trowel-grade mastic where not otherwise indicated.

0.5 CLEANING

A. Remove dampproofing materials from surfaces not intended to receive dampproofing.

PART 4 - MEASUREMENT AND PAYMENT

0.1 MEASUREMENT

A. Bituminous dampproofing will be measured as per square foot complete in place, including all preparation, accessories and incidentals.

0.2 PAYMENT

A. Payment for bituminous dampproofing will be made at the Contract unit price for the quantities as specified above.

0.3 PAYMENT ITEMS

ITEM NO.	DESCRIPTION	UNIT
0716.102	BITUMINOUS DAMPPROOFING	SF

END OF SECTION

NOTES TO THE DESIGNER

Α.	Any request to modify or waive the specification requirements listed below
	must be approved in writing by the MBTA's Director of Design:

1. None